

## REMARKS

### Status of the Claims

#### *Pending claims*

Claims 1 to 92 as filed are pending.

#### *Claims added and amended in the instant amendment*

Claims 1 to 23, 40 to 42, 61, 63, 65, 67, 69 to 78 and 82 to 85 are amended, claims 93 to 102 are added and claims 24 to 39, and 56 to 60, 64, 66, 86 and 87 are canceled, without prejudice. Thus, after entry of the instant amendment, claims 1 to 23, 40 to 55, 61 to 63, 65, 67 to 85, and 88 to 102 will be pending.

### Support for the Claim Amendments

The specification sets forth an extensive description of the invention in the new and amended claims. Support for claims directed to nucleic acids and polypeptides having various sequence identities to exemplary sequences of the invention can be found, inter alia, on page 10, paragraph 53, on page 40, paragraph 173, and on page 50, paragraph 210. Support for claims directed to vectors, such as expression vectors, and host cells comprising nucleic acids of the invention can be found, inter alia, on page 22, paragraphs 99 to 102, and page 23, paragraph 104, and pages 24 to 25, paragraphs 112 to 113.

### The Restriction Requirement

The Patent Office has alleged that the pending claims of the application are directed to nine separate and distinct inventions under 35 U.S.C. §121 (Groups I to IX).

The Patent Office has further alleged that for each of the inventions I to IX, an election of one of the inventions of (A) to (J) is required.

### The Election

In response to the Restriction Requirement, Applicants elect Group I, claims 1 to 23, 40, 41, and 67 to 85, drawn to DNA, vectors, hosts cells and expression of esterases, and invention (D), with traverse.

Applicants respectfully request that invention (G), the nucleic acid SEQ ID NO:29 that encodes SEQ ID NO:39, be rejoined to invention (D), the nucleic acid SEQ ID NO:26 that encodes SEQ ID NO:36.

*Rejoinder under In re Ochiai*

Applicants respectfully request that, after the elected product claims have been found to be allowable, all withdrawn process (methods) claims which depend from or otherwise include all of the limitations of the allowed product claims be rejoined. MPEP §821.04; pg 800-63, 8th Edition, Aug. 2001/ revision Feb. 2003; In re Ochiai, 37 USPQ2d 1127 (Fed. Cir. 1995); In re Brouwer, 37 USPQ2d 1663 (Fed. Cir. 1995); 1184 OG 86, 3/26/96.

Withdrawn process (methods) claims that should be rejoined under In re Ochiai include claims 42 to 55 (methods for generating a variant using the allowed product), claims 61 to 63 (methods for comparing and sequence and methods for identifying a feature using the allowed product), claim 65 (method of catalyzing the hydrolysis of esters using the allowed product), and claims 88 to 92 (method of modifying small molecules using the allowed product).

Reasons to reconsider and withdraw restriction requirement

Applicants respectfully request that invention (G), the nucleic acid SEQ ID NO:29 that encodes SEQ ID NO:39, be rejoined to invention (D), the nucleic acid SEQ ID NO:26 that encodes SEQ ID NO:36.

Applicants respectfully request the Patent Office reconsider and, in part, withdraw the restriction requirement for the following reasons:

The nucleic acid SEQ ID NO:29 that encodes SEQ ID NO:39, and the nucleic acid SEQ ID NO:26 that encodes SEQ ID NO:36, both encode esterases; both were derived from the same species, *Aquifex*; and, these two nucleic acids have about 70% sequence identity to each other.

Accordingly, Applicants respectfully aver that after a complete search directed to the elected SEQ ID NO:26 (encoding SEQ ID NO:36), it would not be an undue burden for the Patent Office to also do a complete search for SEQ ID NO:29 (encoding SEQ ID NO:39). Accordingly, Applicants respectfully request the Patent Office to rejoin all claims directed to SEQ ID NO:39 to claims directed to SEQ ID NO:36.

CONCLUSION

In view of the foregoing amendment and remarks, Applicants believe all claims pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

Applicant : Dan E. Robertson et al.  
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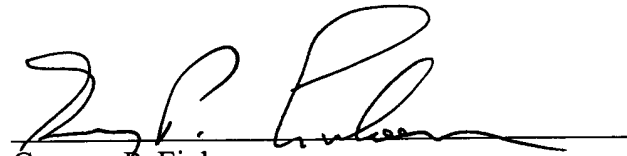
Attorney's Docket No.: 09010-010003 / DIVER 1180-2

If any additional necessary fees are required, the Commissioner is authorized to deduct such fees from the undersigned's Deposit Account No. 06-1050. Please credit any overpayment to the above-noted Deposit Account.

Respectfully submitted,

Date:

May 27, 2003

  
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